

ABSTRACT

This invention relates to an additive for a non-aqueous electrolyte in a battery having a sufficiently high boiling point and capable of ensuring a sufficient safety of an electrolyte even in an
5 emergency such as the short-circuiting or the like without being vaporized in the use under high temperature and capable of giving excellent low-temperature characteristics, and more particularly to an additive for a non-aqueous electrolyte in a battery, which is composed of a phosphazene compound represented by the formula of $(\text{NPX}_2)_n$
10 (wherein Xs are independently a halogen element, and n is an integer of 3-15) and containing at least two kinds of halogen elements.